

What is claimed is:

1. An apparatus for manufacturing an optical fiber soot comprising a core partition provided on a periphery of a core burner, in a reactor of the apparatus to be used in a VAD method.
2. The apparatus according to claim 1, wherein said core partition has an opening portion at a core burner side.
3. The apparatus according to claim 1, wherein said core partition at least has a height that is same as a position of a core burner nozzle, the core partition has a cylindrical shape having a diameter not less than the diameter of a porous soot, the core partition is provided below the porous soot, and a bottom of the core partition contacts a bottom surface of said reactor.
4. The apparatus according to claim 1, wherein the width of the opening portion of the core partition is smaller than the width of the core partition itself.
5. The apparatus according to claim 1, wherein the width d of the opening portion of said core partition has

a value satisfying:  $0.5W(D) < d < 0.8W(D)$   
to the width W or the diameter D of said core partition.

6. The apparatus according to claim 1, wherein the  
5 width d of the opening portion of said core partition is  
changable.

7. The apparatus according to claim 1, wherein the  
width d of the opening portion of said core partition is  
10 about ten times the bore width b of the aperture of the  
core burner.

8. The apparatus according to claim 1, wherein said  
core partition rectifies the airflow in said reactor.  
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9. A method for manufacturing an optical fiber soot,  
comprising using an apparatus for manufacturing an optical  
fiber soot, wherein, in the apparatus, a core partition is  
provided on a periphery of a core burner, in a reactor of  
20 said apparatus to be used in a VAD method.

10. The method according to claim 9, wherein said core  
partition has an opening portion at said core burner side.